

A resistance member (e.g., fuel holding portion of the lower tie plate) is provided at the lower end of the fuel assembly. Provision is made of a coolant ascending path in which said water rods have coolant inlet ports that are open in a region lower than the resistance member to upwardly guide the coolant, and a coolant descending path which has a coolant delivery port that is open in a region higher than the resistance member to downwardly guide the coolant. The coolant ascending path and the coolant descending path are communicated with each other at their upper end portions.